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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/829,559	04/22/2004	Asher Hazanchuk	ALT.P030 (A1252)	6357
27296	7590	07/16/2008		
LAWRENCE M. CHO			EXAMINER	
P.O. BOX 2144			DO, CHAT C	
CHAMPAIGN, IL 61825				
		ART UNIT	PAPER NUMBER	
		2193		
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		07/16/2008	PAPER	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

**Advisory Action  
Before the Filing of an Appeal Brief**

**Application No.**

10/829,559

**Applicant(s)**

HAZANCHUK ET AL.

**Examiner**

CHAT C. DO

**Art Unit**

2193

**--The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

THE REPLY FILED 01 July 2008 FAILS TO PLACE THIS APPLICATION IN CONDITION FOR ALLOWANCE.

1. ☒ The reply was filed after a final rejection, but prior to or on the same day as filing a Notice of Appeal. To avoid abandonment of this application, applicant must timely file one of the following replies: (1) an amendment, affidavit, or other evidence, which places the application in condition for allowance; (2) a Notice of Appeal (with appeal fee) in compliance with 37 CFR 41.31; or (3) a Request for Continued Examination (RCE) in compliance with 37 CFR 1.114. The reply must be filed within one of the following time periods:

- a) ☒ The period for reply expires 3 months from the mailing date of the final rejection.  
b) ☐ The period for reply expires on: (1) the mailing date of this Advisory Action, or (2) the date set forth in the final rejection, whichever is later. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of the final rejection.  
Examiner Note: If box 1 is checked, check either box (a) or (b). ONLY CHECK BOX (b) WHEN THE FIRST REPLY WAS FILED WITHIN TWO MONTHS OF THE FINAL REJECTION. See MPEP 706.07(f).

Extensions of time may be obtained under 37 CFR 1.136(a). The date on which the petition under 37 CFR 1.136(a) and the appropriate extension fee have been filed is the date for purposes of determining the period of extension and the corresponding amount of the fee. The appropriate extension fee under 37 CFR 1.17(a) is calculated from: (1) the expiration date of the shortened statutory period for reply originally set in the final Office action; or (2) as set forth in (b) above, if checked. Any reply received by the Office later than three months after the mailing date of the final rejection, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**NOTICE OF APPEAL**

2. ☐ The Notice of Appeal was filed on \_\_\_\_\_. A brief in compliance with 37 CFR 41.37 must be filed within two months of the date of filing the Notice of Appeal (37 CFR 41.37(a)), or any extension thereof (37 CFR 41.37(e)), to avoid dismissal of the appeal. Since a Notice of Appeal has been filed, any reply must be filed within the time period set forth in 37 CFR 41.37(a).

**AMENDMENTS**

3. ☐ The proposed amendment(s) filed after a final rejection, but prior to the date of filing a brief, will not be entered because  
(a) ☐ They raise new issues that would require further consideration and/or search (see NOTE below);  
(b) ☐ They raise the issue of new matter (see NOTE below);  
(c) ☐ They are not deemed to place the application in better form for appeal by materially reducing or simplifying the issues for appeal; and/or  
(d) ☐ They present additional claims without canceling a corresponding number of finally rejected claims.

NOTE: \_\_\_\_\_. (See 37 CFR 1.116 and 41.33(a)).

4. ☐ The amendments are not in compliance with 37 CFR 1.121. See attached Notice of Non-Compliant Amendment (PTOL-324).  
5. ☐ Applicant's reply has overcome the following rejection(s): \_\_\_\_\_.  
6. ☐ Newly proposed or amended claim(s) \_\_\_\_\_ would be allowable if submitted in a separate, timely filed amendment canceling the non-allowable claim(s).  
7. ☒ For purposes of appeal, the proposed amendment(s): a) ☐ will not be entered, or b) ☒ will be entered and an explanation of how the new or amended claims would be rejected is provided below or appended.  
The status of the claim(s) is (or will be) as follows:  
Claim(s) allowed: \_\_\_\_\_.  
Claim(s) objected to: \_\_\_\_\_.  
Claim(s) rejected: 1,3 and 5-22.  
Claim(s) withdrawn from consideration: \_\_\_\_\_.

**AFFIDAVIT OR OTHER EVIDENCE**

8. ☐ The affidavit or other evidence filed after a final action, but before or on the date of filing a Notice of Appeal will not be entered because applicant failed to provide a showing of good and sufficient reasons why the affidavit or other evidence is necessary and was not earlier presented. See 37 CFR 1.116(e).  
9. ☐ The affidavit or other evidence filed after the date of filing a Notice of Appeal, but prior to the date of filing a brief, will not be entered because the affidavit or other evidence failed to overcome all rejections under appeal and/or appellant fails to provide a showing of good and sufficient reasons why it is necessary and was not earlier presented. See 37 CFR 41.33(d)(1).  
10. ☐ The affidavit or other evidence is entered. An explanation of the status of the claims after entry is below or attached.

**REQUEST FOR RECONSIDERATION/OTHER**

11. ☒ The request for reconsideration has been considered but does NOT place the application in condition for allowance because:  
See Continuation Sheet.  
12. ☐ Note the attached Information Disclosure Statement(s). (PTO/SB/08) Paper No(s). \_\_\_\_\_.  
13. ☐ Other: \_\_\_\_\_.

/Chat C. Do/  
Primary Examiner, Art Unit 2193

Continuation of 11, does NOT place the application in condition for allowance because: The applicant argues in pages 11-16 for claims rejected under 35 U.S.C. 101 that the claims do transform an article to a different state and produce a useful, tangible and concrete result wherein the transforming of an article to a different state is seen as producing a summing scaled product of the input operands and the result of the methods is achieved without having to employ a DSP capable of multiplying at least the total number of bits of the two numbers.

The examiner respectfully submits that the applicant does not fully address every rejection made in the Office action, particularly the preemption of every substantial practical application of the idea embodied by the claims wherein producing summing scaled product is widely seen or applied in most applications. In response to the above argument, producing a summing scaled product by summing the partial products and scale the intermediated result is not a transformation to a different state, rather it is just a mathematical transformation. The input is a set of number and the output is just another set of number wherein the another set of number is the summing scaled product of the set of number. In addition, the alleged feature of producing a summing scaled product of the input operands without having to employ a DSP capable of multiplying at least the total number of bits of the two numbers is not explicitly or directly seen in the claims.

The applicant argues in pages 16-21 for claims rejected under 35 U.S.C. 103(a) as being unpatentable over Bhandal in view of Schier that the secondary reference by Schier teaches away from the combination with the primary reference by Bhandal, in particular Schier does not disclose the additional shifting operations after the multiplications in FPGA. Further, there is no suggestion or motivation to make the proposed modification in order to properly combine the references.

The examiner respectfully submits that the secondary reference by Schier only needs to cite or provide the missing element(s) from the primary reference in order to arrive the claiming invention. The secondary reference does not need to show every limitations cited in the claims such as additional shifting operations after the multiplications in FPGA. In generally, the primary reference shows most of elements in the claimed invention except the FPGA and the second product is retrieved from a memory. These two missing elements are wellknown in the art of the technology and widely used in many practical application as clearly seen in the secondary reference in Figures 1-4. Thus, it is properly and reasonably to combine the references to meet every limitations in the claimed invention. The secondary reference does not explicitly state that the general combination by the examiner is not permitted, rather it is just the applicant's allegation. Nowhere in the specification of the secondary reference explicitly states that the FPGA and second product is retrieved from a memory CANNOT combine with other configurations, particularly the configuration cited in the primary reference. In addition, the motivation or suggestion is clearly provided in the Office action as the combination would enable to improve the system performance in further with KSR.

The applicant argues in pages 21-22 for claim 18 rejected under 35 U.S.C. 103(a) that the cited secondary reference does not disclose the missing feature as the DSP, the memory, the adder reside on a FPGA as applied in the rejection by the Examiner.

The examiner respectfully submits that Figures 1-4 and abstract of the secondary reference clearly disclose the above missing feature as FPGA wherein the FPGA includes the DSP for processing/filtering, the memory for storing, and the adder for adding.